IN THE CLAIMS

Please amend the claims as indicated below:

1. (Currently Amended) An optical fiber for transporting a beam of light from a laser light source and projecting the beam of light towards a target in an even illumination pattern, comprising:

an input end for receiving the beam of light; and

an exit end for projecting the beam of light towards the target, said exit end having a major axis,

wherein the exit end has at least one diffractive optical pattern formed thereon, wherein said optical pattern comprises means for providing ~~provides~~ an even illumination pattern across the target, wherein said illumination pattern has a major axis greater than said major axis of said exit end.

2. (Previously Presented) The optical fiber as described in claim 1, wherein the diffractive optical pattern is formed by one of the group selected from etching, molding and cutting.

3. (Previously Presented) The optical fiber as described in claim 1, wherein the diffractive optical pattern is one of a binary or multi-level diffractive pattern.

4. (Previously Presented) The optical fiber as described in claim 1, wherein the diffractive optical pattern is a continuous diffractive pattern.

5. (Previously Presented) The optical fiber as described in claim 1, wherein the exit end has a plurality of optical diffractive patterns incorporated thereon.

6. (Previously Presented) The optical fiber as described in claim 1, wherein the optical fiber is coupled to a laser emitting diode at the input end.

7. (Currently Amended) A system for recording images using a camera, comprising:

at least one laser emitting diode; and

at least one fiber optic coupled to a respective laser emitting diode at an input end thereof having an exit end with a diffractive optical pattern formed thereon, said exit end having a major axis,

wherein laser light emitted from each laser emitting diode travels through a respective fiber optic and is projected onto a target after passing through the diffractive optical pattern to illuminate a portion of the target for recording images of the target, and said laser light provides an even illumination pattern across the target, wherein said illumination pattern has a major axis greater than said major axis of said exit end.

8. (Previously Presented) The system as described in claim 7, wherein the diffractive optical pattern creates a rectangular illumination pattern on the target.

9. (Previously Presented) The system as described in claim 7, wherein the system comprises a plurality of laser emitting diodes and a respective plurality of fiber optics.

10. (Previously Presented) The system as described in claim 9, wherein the exit ends of the fiber optics are arranged in a circular fashion around the camera.

11. (Previously Presented) The system as described in claim 7, wherein the diffractive optical pattern is formed by one of the group selected from etching, molding and cutting.

12. (Previously Presented) The system as described in claim 7, wherein the diffractive optical pattern is one of a binary or multi-level diffractive pattern.

13. (Previously Presented) The system as described in claim 7, wherein the diffractive optical pattern is a continuous diffractive pattern.

14. (Previously Presented) The system as described in claim 7, wherein there are a plurality of optical diffractive patterns on the exit end of each fiber optic.

15. (Currently Amended) The system as described in claim 7, wherein said ~~optical~~ fiber optic is a multimode fiber.

16. (Previously Presented) The optical fiber as described in claim 1, wherein said optical fiber is a multimode fiber.

17. (New) The optical fiber of claim 1, wherein said major axis of said illumination pattern has length which is at least three times the length of said major axis of said exit end.